

## **19.25 Tree Retention and Landscaping**

19.25.010	User Guide
19.25.020	Purpose.
19.25.030	Applicability.
19.25.040	Landscaping Categories.
19.25.050	Landscaping - Types and description.
19.25.060	Landscaping - Street frontages.
19.25.070	Landscaping - Surface parking areas.
19.25.080	Landscaping - General requirements.
19.25.090	Landscaping - Alternative options.
19.25.100	Landscaping - Irrigation.
19.25.110	Landscaping - Installation.
19.25.120	Significant trees - Retention required.
19.25.130	Significant trees - Retention plan.
19.25.140	Significant trees - Incentives for retention.
19.25.150	Significant trees - Protection.
19.25.160	Significant trees - Replacement.
19.25.170	Maintenance.
19.25.180	Bonds/security.

### **19.25.010 User Guide.**

Chapter 19.15 of this Code containing the use zone charts assign a *landscaping* category to each *use* in each zone. This category is either “A”, “B”, “C”, “D” “E” or “F”. This Chapter contains the specific requirements that pertain to each category. This Chapter also establishes certain minimum requirements for all *uses*, and minimum requirements for *landscaping* of parking lots and retention of existing trees. [Ord. 529, 2009, Ord. 293 § 1, 2000]

### **19.25.020 Purpose.**

The purpose of this chapter is to provide minimum standards for tree retention and *landscaping* to foster a healthy and attractive community; to maintain a positive community image; to improve the aesthetic quality of the built environment; to enhance quality of life; to protect and enhance property values; to promote retention and protection of existing vegetation; to reduce the impacts of development on drainage systems and natural habitats; to absorb wind and noise; to enhance air quality; to increase compatibility between different land *uses*; and to increase privacy for and within *residential zones* by:

1. Providing visual relief from large expanses of parking areas and reduction of perceived *building* scale;
2. Providing physical separation between residential and nonresidential areas;
3. Providing visual *screens* and barriers as a transition between differing land *uses*;
4. Retaining existing vegetation and *significant trees* by incorporating them into the *site* design; and
5. Providing increased areas of permeable surfaces to allow for:
  - A. Infiltration of surface water into ground water resources;

B. Reduction in the quantity of storm water discharge; and

C. Improvement in the quality of storm water discharge. [Ord. 293 § 1, 2000]

#### 19.25.030 Applicability.

This Chapter applies to all new development and to existing development with non-conforming *landscaping* that is required to comply based on BMC 19.55.035. In the event of a conflict or overlap between *landscaping* standards in this Code, the most stringent requirements shall apply, as determined by the *Director*. [Ord. 293 § 1, 2000]

#### 19.25.040 Landscaping Categories.

1. The use zone charts in BMC 19.15 establish a *landscaping* category for each *use* in each zone. Table 19.25.040-1 indicates the requirements that must be met for each landscape category. If different landscape categories apply to a *site*, the category that provides for the most *landscaping* shall apply. [Ord. 529, 2009, Ord. 441 § 12, 2005]

Table 19.25.040-1

Landscape Category	Along <i>Property Line</i> Abutting a Public <i>Right-of-Way</i> (Except a Freeway or <i>Alley</i> )	Along <i>Property Line</i> Abutting a Freeway*	Along All Other <i>Property Lines</i> (Except Along an <i>Alley</i> )	Along <i>Building Façade</i> Greater Than 35' High or 50' Wide	Surface Parking Area <i>Landscaping</i> Required? (see BMC 19.25.070)
A	None	None	None	None	No
B	10' wide Type III	10' wide Type II	None, except in a transition area (see BMC 19.17.015)	5' wide Type IV	Yes
C	10' wide Type III	10' wide Type II	None, except in a transition area (see BMC 19.17.015)	5' wide Type IV	Yes
D	15' wide Type I	10' wide Type I	10' wide Type II, except when abutting an I zone, then none	5' wide Type IV	Yes
E	See BMC 19.47 and 19.49 for <i>landscaping</i> requirements in the DC and SPA-1 zones. The only sections of BMC 19.25 that apply to the DC and SPA-1 zones are: BMC 19.25.080, 19.25.100, 19.25.110, 19.25.170 and 19.25.180.				
F**	25' wide, Type II (along 8 <sup>th</sup> Ave. So. or Des Moines Memorial Dr.); otherwise, 15' wide, Type III	None	50' wide Type I (along northern perimeter of the AI zone); otherwise, 10' wide Type III	5' wide Type IV	Yes

\**Landscaping* abutting a freeway shall be installed within the freeway *right-of-way*, if permitted by the Washington State Department of Transportation (WSDOT). If such approval is not granted, the *landscaping* shall be installed on the *site*.

\*\* The required *landscaping* width can be reduced up to 50% through use of a landscape berm. Minimum berm width shall be equal to the amount of *landscaping* width reduction. Minimum berm *height* shall be 1 foot for each 3 feet of berm width or portion thereof.

The required *landscaping* width can be reduced up to 75% through use of a solid wall and *landscaping*. The wall shall use materials (such as wood or concrete) in the same architectural style of the *building* on the property. Minimum wall *height* shall be 8 feet. Required *landscaping* shall be on the outside of the wall.

2. Additional *landscaping* may be required in the use zone charts in BMC 19.15 and transition standards in BMC 19.17.015. [Ord. 396 § 1, 2003, Ord. 293 § 1, 2000]

#### **19.25.050 Landscaping - Types and description.**

The four types of *landscaping* are described and applied as follows:

1. Type I *Landscaping*.

- A. Type I *landscaping* is a "full screen" that functions as a visual barrier.

- B. Type I *landscaping* shall consist of:

- i. A mix of primarily *evergreen* trees and shrubs placed to form a continuous screen;
    - ii. At least 70 percent *evergreen* trees;
    - iii. *Evergreen* trees spaced no more than 25 feet on center;
    - iv. *Deciduous* trees spaced no more than 30 feet on center;
    - v. *Evergreen* shrubs spaced no more than four feet apart; and
    - vi. *Ground cover* pursuant to BMC 19.25.070;

2. Type II *Landscaping*.

- A. Type II *landscaping* is a "filtered screen" that functions as a visual separator.

- B. Type II *landscaping* shall consist of:

- i. A mix of *evergreen* and *deciduous* trees and shrubs spaced to create a filtered screen;
    - ii. At least 50 percent *deciduous* trees and at least 30 percent *evergreen* trees;
    - iii. *Evergreen* trees spaced no more than 25 feet on center;
    - iv. *Deciduous* trees spaced no more than 30 feet on center;
    - v. Shrubs spaced no more than five feet apart; and
    - vi. *Ground cover* pursuant to BMC 19.25.070;

3. Type III *Landscaping*.

A. Type III *landscaping* is a "see-through screen" that functions as a partial visual separator to soften the appearance of parking areas and *building* elevations.

B. Type III *landscaping* shall consist of:

- i. A mix of *evergreen* and *deciduous* trees spaced to create a continuous canopy;
- ii. At least 70 percent *deciduous* trees;
- i. *Evergreen* trees spaced no more than 25 feet on center;
- ii. *Deciduous* trees spaced no more than 30 feet on center;
- v. Shrubs, that do not exceed a height of four feet, spaced no more than four feet apart; and
- vi. *Ground cover* pursuant to BMC 19.25.070;

4. Type IV *Landscaping*.

A. Type IV *landscaping* is "parking area *landscaping*" and "*building façade landscaping*" that provides shade and visual relief while maintaining clear sight lines within parking areas;

B. Type IV *landscaping* shall consist of:

- i. Canopy-type *deciduous* trees spaced no more than 30 feet on center, or *evergreen* trees spaced no more than 25 feet on-center. At least 70 percent of the trees shall be *deciduous*.
- ii. Shrubs that do not exceed a height of four feet;
- iii. Plantings contained in planting islands or strips having an area of at least 75 square feet and with a narrow dimension of no less than four feet;
- iv. *Ground cover* pursuant to BMC 19.25.090. [Ord. 293 § 1, 2000]

**19.25.060 Landscaping - Street frontages.**

Perimeter *landscaping* along *street frontages* shall be provided as follows:

1. For single detached subdivisions:

A. Trees shall be planted at the rate of one tree for every:

- i. Fifty feet of *frontage* along a neighborhood collector *street*; and
- ii. Forty feet of *frontage* along an *arterial street*.

B. The trees shall be:

- i. Located within the *right-of-way* if permitted by the custodial state or local agency;
  - ii. No more than 20 feet from the *right-of-way* line when located within a *lot*;
  - iii. Maintained by the adjacent landowner unless part of a city maintenance program; and
  - iv. A species approved by the city.
- C. The trees may be spaced at irregular intervals in order to accommodate sight distance requirements for driveways and intersections. [Ord. 293 § 1, 2000]

**19.25.070 Landscaping - Surface parking areas.**

1. *Perimeter Landscaping.* A minimum 5' wide Type IV landscape strip shall be provided on private property along the perimeter of a parking area. The width of the landscape strip shall be increased to 7' if vehicle overhangs into the landscape strip are allowed.
2. *Interior Landscaping.* The following requirements apply to any surface parking area with 10 or more parking stalls. The interior landscape requirement is in addition to the perimeter landscape area required in BMC 19.25.070.1, and the *landscaping* required by BMC 19.25.040.
  - A. *Uses* requiring landscape category B shall provide interior planting areas at the rate of 20 square feet per parking stall;
  - B. *Uses* requiring landscape category C or D shall provide interior planting areas at a rate of:
    - i. Twenty square feet per parking stall when 10 to 30 parking stalls are provided; and
    - ii. Twenty-five square feet per parking stall when 31 or more parking stalls are provided;
  - C. Each interior planting area shall contain at least 75 square feet, with a narrow dimension of no less than four feet (six feet if vehicles are allowed to overhang into the landscaped area);
  - D. *Evergreen* or canopy-type *deciduous* trees shall be provided and distributed throughout the parking area at a rate of:
    - i. One tree for every 10 parking stalls for a *use* requiring landscape category C or D; or
    - ii. One tree for every five parking stalls for a *use* requiring landscape category B.
  - E. *Ground cover* shall be provided pursuant to BMC 19.25.080.
  - F. *Landscaping* islands shall be provided at the ends of each row of parking, except ends of rows that abut required perimeter *landscaping*.
  - G. The maximum distance between any parking stall and required interior parking area *landscaping* shall be no more than 65 feet. [Ord. 293 § 1, 2000]

**19.25.080 Landscaping - General requirements.**

1. A *landscaping* and irrigation plan shall be submitted for review and approval by the *Director*. Written requirements for the *landscaping* and irrigation plan shall be established by the *Director*.

The *landscaping* and irrigation plan shall be prepared by a Washington State registered landscape architect, Washington Certified Nurseryman/Landscaper, or other qualified landscape designer as authorized by the *Director*. The irrigation plan may be prepared by a certified irrigation designer.

2. New *landscaping* materials shall include species native to the Pacific Northwest or non-native noninvasive species that have adapted to the climatic conditions of the coastal region of the Pacific Northwest in the following minimum amounts:
  - A. Seventy-five percent of groundcover and shrubs, and
  - B. Fifty percent of trees;
3. At least 60 percent of new *landscaping* materials shall consist of drought-tolerant species, except where *site* conditions within the required landscape areas assure adequate moisture for growth;
4. Existing vegetation may be used to augment new plantings to meet the standards of this chapter;
5. *Deciduous* trees shall have a caliper of at least 1.75 inches at the time of planting. The caliper may be averaged, but no individual tree shall have a caliper of less than 1.5 inches;
6. *Evergreen* trees shall be at least six feet in height measured from treetop to the ground at the time of planting;
7. When the width of any landscape strip is 20 feet or greater, the required trees shall be staggered in two or more rows;
8. Shrubs shall be:
  - A. Two-gallon size at time of planting in Type II, III and IV *landscaping*,
  - B. At least 24 inches in height at the time of planting for Type I *landscaping*, and
  - C. Maintained at a height not exceeding four feet when located in Type III or IV *landscaping*;
9. *Ground covers* shall be planted and spaced to result in total coverage of the required landscape area within three years as follows:
  - A. Four-inch pots at 18 inches on center, or
  - B. One-gallon or greater sized containers at 24 inches on center;
10. Turf grass may be used as *ground cover* only in Type III and IV landscape areas provided that the grass area:
  - A. Constitutes no more than 30 percent of such landscape areas; and
  - B. Is at least five feet wide at the smallest dimension;
11. Turf grass and *ground cover* areas shall contain at least two inches of composted organic material at finish grade;

12. All *fences* shall be placed on the inward side of any required perimeter *landscaping*.
13. Berms shall not exceed a slope of two horizontal feet to one vertical foot (2:1);
14. Existing soils shall be augmented with a two-inch layer of fully composted organic material rototilled a minimum of six inches deep;
15. Landscape areas shall be covered with at least two inches of mulch to minimize evaporation. Mulch shall consist of materials such as yard waste, sawdust and/or manure that is fully composted;
16. Drought-tolerant and nondrought-tolerant species shall be grouped separately and be served by separate irrigation systems, zones or controls;
17. Permanent cast in place concrete curbs or structural barriers shall be provided to protect landscape areas from damage by vehicles. [Ord. 293 § 1, 2000]

#### **19.25.090 Landscaping - Alternative options.**

The following alternative landscape options may be allowed only if they accomplish equal or better levels of screening and are subject to *Director* approval:

1. The width of perimeter *landscaping* required by BMC 19.25.040 or BMC 19.25.070 may be reduced up to 25 percent along any portion where:
  - A. A development retains an additional 10 percent of *significant trees* or an additional 10 *significant trees* per acre on-*site* (above the requirements of BMC 19.25.120(3) and (4)), whichever is greater; or
  - B. Berms at least three feet in height or architectural barriers at least six feet in height (consistent with the style and materials of the building(s) on *site*) are incorporated into the landscape design; and
  - C. The landscape materials that would have been planted in the perimeter landscape area are planted along the *street* facing *façade* of the *building(s)* on the *site*. These landscape materials are in addition to the required *building façade landscaping* in BMC 19.25.040.
2. The *landscaping* requirements of BMC 19.25.040 or BMC 19.25.070 may be modified when:
  - A. Existing conditions on or adjacent to the *site*, such as significant topographic differences, vegetation, *structures* or utilities would render application of this chapter ineffective or result in scenic view obstruction; or
  - B. The landscape materials are incorporated elsewhere on-*site* and the modification would result in comparable or superior *landscaping* than would result from compliance with the required standard. [Ord. 293 § 1, 2000]

#### **19.25.100 Landscaping - Irrigation.**

All plantings shall receive sufficient water to ensure survival as follows:

1. Except for areas of undisturbed existing vegetation or low areas with existing high soil moisture conditions, all landscape areas shall have automatic temporary or permanent irrigation systems as described in this section. The *applicant* may request and the *Director* may approve a manual irrigation plan and schedule in lieu of automatic irrigation.
2. Temporary irrigation systems may be removed after 24 months or two growing seasons, whichever occurs first, provided that the plantings are established. Temporary irrigation systems are allowed for:
  - A. Areas of undisturbed existing vegetation that are being enhanced with additional plantings;
  - B. Areas where existing *site* conditions assure adequate soil moisture for growth, only as required to sustain new plantings;
  - C. Landscape areas consisting of drought-tolerant vegetation.
3. Permanent irrigation systems are required within all other required landscape areas, provided such systems shall be designed by a certified water use auditor and with:
  - A. Moisture or precipitation sensors;
  - B. Automatic timers set for operation during periods of minimum evaporation and that assure adequate moisture levels;
  - C. Head-to-head spacing, if sprinkler heads are proposed;
  - D. Pressure regulating devices;
  - E. Backflow prevention devices; and
  - F. Separate irrigation zones for:
    - i. Turf and planting beds; and
    - ii. Other drought-tolerant species. [Ord. 293 § 1, 2000]

**19.25.110 Landscaping - Installation.**

1. *Landscaping* shall be installed prior to issuance of a certificate of occupancy for the project or project phase.
2. The time limit for compliance may be extended to allow installation of *landscaping* during the next appropriate planting season, provided that a bond or other financial guarantee pursuant to BMC 19.25.180 is submitted prior to issuance of a certificate of occupancy. [Ord. 293 § 1, 2000]

**19.25.120 Significant trees - Retention required.**

*Significant trees* shall be retained as follows:

1. All *significant trees* on an undeveloped *lot* shall be retained.

2. Landscape category A: Thirty percent (30%) of the *significant trees* located on the *site*, excluding *critical areas* or their *buffers*.
3. Landscape category B: Ten percent of the *significant trees* located on the *site*, excluding *critical areas* or their *buffers*.
4. Landscape categories C and D: Five percent of the *significant trees* located on the *site*, excluding *critical areas* or their *buffers*.
5. If *significant trees* were previously located in a closed, forested situation, an adequate area of smaller trees shall be retained or replaced on the fringe of such significant trees;
6. A grouping of three or more existing trees with canopies that touch or overlap, may be substituted for each required *significant tree*, provided each tree has a diameter of at least three inches when measured four feet above grade;
7. Except as provided in BMC 19.25.120.8, *significant trees* to be retained shall not include *significant trees* that are:
  - A. Damaged or diseased; or
  - B. Safety hazards due to potential root, trunk or primary limb failure, or exposure of mature trees which have grown in a closed, forested situation.
8. At the discretion of the *Director*, damaged or diseased or standing dead trees may be retained and counted toward the *significant tree* requirement if demonstrated that such trees will provide important wildlife habitat and is not classified as a dangerous tree. [Ord. 293 § 1, 2000]
9. If the formula for determining the number of *significant trees* to be retained results in a fraction, the number of *significant trees* to be retained shall be rounded up to the nearest whole number. [Ord. 484. 1, 2008]

#### **19.25.130 Significant trees - Retention plan.**

The *applicant* shall submit a tree retention plan concurrent with a land use review application, grading permit application, building permit application, preliminary subdivision application or short subdivision application, whichever is reviewed and approved first. The *Director* shall compile and maintain a database of significant trees based upon the submitted and approved tree retention plans. The tree retention plan shall consist of:

1. A tree survey that identifies the location, size and species of all *significant trees* on a *site*. The tree survey may be conducted by a method that locates individual *significant trees* or by using standard timber cruising methods to reflect general locations, numbers and grouping of *significant trees* provided that, when using either method, the survey:
  - A. Shall also show the location and species of each *significant tree* that is intended to qualify for additional credit pursuant to BMC 19.25.140; and
  - B. Any tree 18 inches or greater diameter for the purpose of establishing wildlife habitat value;
2. A development plan identifying the *significant trees* that are proposed to be retained, transplanted or restored. [Ord. 293 § 1, 2000]

#### **19.25.140 Significant trees - Incentives for retention.**

Each *significant tree* that is retained may be credited as two trees for complying with the retention requirements of BMC 19.25.120, provided it meets one or more of the following criteria:

1. The tree exceeds 60 feet in height, or 24 inches in diameter for *evergreen* trees or 30 inches for *deciduous* trees;
2. The tree is located in a grouping of at least five trees with canopies that touch or overlap;
3. The tree provides energy savings through winter wind protection or summer shading as a result of its location relative to *buildings*;
4. The tree belongs to a unique or unusual species;
5. The tree is located within 25 feet of any *critical area* or required *critical area buffer*; and
6. The tree is 18 inches or greater and is identified as providing valuable wildlife habitat. [Ord. 293 § 1, 2000]

#### **19.25.150 Significant trees - Protection.**

To provide the best protection for *significant trees*:

1. No clearing shall be allowed on a *site* until approval of tree retention and landscape plans;
2. An area of prohibited disturbance, generally corresponding to the drip line of the *significant tree* shall be protected during construction with a temporary five-foot- high chainlink or plastic net *fence*. The fencing shall be installed prior to issuance of development permits for the *site*;
3. No *impervious surfaces*, fill, excavation, or storage of construction materials shall be permitted within the area defined by such *fencing*;
4. A rock well shall be constructed if the grade level around the tree is to be raised by more than one foot. The inside diameter of the well shall be equal to the diameter of the dripline of the tree;
5. The grade level shall not be lowered within the larger of the two areas defined as follows:
  - A. The drip line of the tree(s); or
  - B. An area around the tree equal to one foot diameter for each inch of tree trunk diameter measured four feet above the ground; and
6. Alternative protection methods may be used if determined by the *Director* to provide equal or greater tree protection. [Ord. 293 § 1, 2000]

#### **19.25.160 Significant trees - Replacement.**

When the required number of significant trees pursuant to BMC 19.25.120 cannot be retained, the required number of significant trees that are removed shall be replaced with: [Ord. 484 . 1, 2008]

1. Transplanted *significant trees*; or
2. New trees measuring three-inch caliper or more, at a replacement rate of one and one-half (1.5) inches diameter for every one inch diameter of the removed *significant tree*; or
3. New trees measuring less than three-inch caliper at a replacement rate of two inches diameter for every one inch diameter of the removed *significant tree* on a space available basis in conjunction with the *site* plan. [Ord. 293 § 1, 2000]

**19.25.170 Maintenance.**

1. All *landscaping* and *significant trees* shall be maintained for the life of the project.
2. All landscape materials and *significant trees* shall be pruned and trimmed as necessary to maintain a healthy growing condition or to prevent primary limb failure;
3. With the exception of dead, diseased or damaged trees specifically retained to provide wildlife habitat, other dead, diseased, damaged or stolen plantings shall be replaced within three months or during the next planting season if the loss does not occur in a planting season; and
4. Landscape areas shall be kept free of trash. [Ord. 293 § 1, 2000]

**19.25.180 Bonds/security.**

Performance bonds or other appropriate security (including letters of credit and set-aside letters) shall be required for a period of two years after the planting or transplanting of vegetation to insure proper installation, establishment and maintenance. [Ord. 293 § 1, 2000]